

### **ABSTRACT OF THE DISCLOSURE**

A power consumption reducing apparatus and method are provided wherein the apparatus includes a periodic active state conversion unit which converts an inactive state into an active state; a beacon frame reception unit which, in an active state, receives a beacon frame; an awake window setting unit which sets the awake window; an awake window interval counting unit which counts the interval value in the awake window; and an inactive state conversion unit which converts the awake window into an inactive state. According to the apparatus, an active state needs to be maintained only during a window interval such that power consumption can be reduced during an inactive interval. In addition, an ATIM window is replaced by an awake window such that an ATIM message that has been regarded as a network overhead, and an acknowledgement response frame to the message are removed, that is, the network overheads are removed.